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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,747	01/28/2005	Toshinori Furuhashi	1254-0267PUS1	9315

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EXAMINER	
KARIMI, PEGEMAN	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
02/20/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/522,747	FURUHASHI ET AL.	
	Examiner	Art Unit	
	Pegeman Karimi	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *1/28/2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashimoto (U.S. Patent No. 5,554,980).

As to claim 1, Hashimoto discloses a display apparatus for presentation (Fig. 4) comprising:

a pointing device (1) equipped with means for detecting angular velocities (2 and 3) in horizontal and vertical directions (col. 14, lines 5-8) and

means (12) for transmitting detected angular velocity information (col. 15, lines 17-24) and

an image display device (21) having means (26 and 132, Fig. 3) for receiving angular velocity information (movement of the pointing device) transmitted from the pointing device (1), (col. 15, lines 45-50) and equipped with a function of moving

(function of moving front, back, left, and right), (col. 15, lines 25-28) a selection marker (108) across a plurality of menu items (222) arranged in vertical and horizontal directions (menu items 222 are arranged in a vertical and horizontal direction), (col. 15, lines 45-50) and

displayed on a screen in accordance with the received angular velocity information (col. 21, lines 61-65),

the display apparatus (21) for presentation characterized by provision of means (9) for determining a menu item (when the switch 9 on the pointing device is pressed) to which the selection marker should be moved (when the curser has moved into a desired icon), (col. 15, lines 51-56) in accordance with the duration of sampling the angular velocities (the angular speed detectors detect the speed of angular motion in the horizontal and vertical directions), (col. 14, lines 5-14) during which the move distance of the pointing device (e.g. move to Y1, Fig. 45B) obtained for every sampling cycle (from time zero to t1, from t1 to (t1+t2), and from (t1+t2) to t) from said angular velocity information exceeds a predetermined value continuously (the cursor moves up to Y1 from the start to time t1 but when it exceeds t1 it does not move from t1 to t2, then the cursor moves once again when the angular velocity exceeds t1+t2).

As to claim 4, this claim differs from claim 1 only in that the limitation "equipped with a picture-in-picture function to move or enlarge a sub-screen displayed on a screen in accordance with the received angular velocity information" and "the display apparatus for presentation characterized by moving or enlarging the sub-screen by a distance".

Hashimoto teaches the image display device equipped with a picture-in-picture function (Fig. 6, there are 4 pictures/menus) to move or enlarge a sub-screen displayed on a screen (cursor 108 selects a desired menu and the selected menu enlarges) in accordance with the received angular velocity information (depending on the elements 2 and 3, which sense the angular velocity the desired menu is selected) and the display apparatus for presentation characterized by moving or enlarging the sub-screen by a distance (e.g. by selecting the VTR menu the selected menu enlarges from its current size to a size of covering the screen, Fig. 8), (col. 15, lines 51-56).

As to claim 6, this claim differs from claim 1, only in that the limitation "equipped with a function of moving a cursor or pointer displayed on a screen" and "means for moving the cursor or pointer by a distance" are additionally recited.

Hashimoto teaches an image display device equipped with a function of moving a cursor or pointer (108) displayed on a screen (col. 21, lines 62-65) and means (2 and 3) for moving the cursor or pointer by a distance (moving the cursor between icons 222).

As to claim 7, this claim differs from claim 6 only in that the limitation "means for changing the rate at which the pointer moves" is additionally recited. Hashimoto teaches means (2 and 3) for changing the rate at which the pointer moves (depending on the angular motion of the remote control at the angle $\theta 1$ the cursor moves a distance of x1 and at the angle $\theta 2$ the cursor moves a distance of x2 and so on), (col. 23, lines 44-50).

As to claim 8, Hashimoto teaches a display system comprising:

a display device (100) and

a pointing device (1) associated with the display device (pointing device 1 controls a cursor, 108, which chooses the icons on the display device) and for use to operate upon an object (108) to change displayed on a display screen by said display device (upon selection of VTR in the menu 220 of Fig. 7, the color of the cursor changes and the VTR mode menu screen 223 appears).

the display system characterized by including:

a position information detecting means (2 and 3) for detecting position information on positions indicated by said pointing device (col. 14, lines 15-18);

a move information sampling means (67, 68, and 68a) for sampling the move distance between said indicated positions (e.g. positions before and after the position Y1) per unit time (from the start to time t1 cursor moves to position Y1, from position t1 to (t1+t2) the cursor does not move, and then from (t1+t2) to time t the cursor moves), (col. 29, lines 2-7), based on the position information detected by the position information detecting means (as can be seen in Fig. 45A, the output of the angular speed depends on detectors 2 and 3), (col. 29, lines 10-14); and

a change amount determining means (67, 68, and 68a, the distance through which the cursor 108 moves when the delay time t of the delay circuit 67 is equal to t1+t2) for determining the amount of change of said object to change on said display screen (col. 28, lines 65-67), based on the duration of sampling (from start to t1, from t1 to (t1+t2), and then from (t1+t2) to t) during which the move distance between said

indicated positions per unit time (from start to t1 the cursor moves to position Y1, from time t1 to (t1+t2) the cursor does not move, and then from time (t1+t2) to t the cursor moves once again), sampled by the move information sampling means (67, 68, and 68a), (col. 28, lines 60-67, & col. 29, lines 2-6), exceeds a threshold continuously (the cursor moves up to Y1 from the start to time t1 but when it exceeds t1 it does not move from t1 to t2, then the cursor moves once again when the angular velocity exceeds t1+t2).

As to claim 9, Hashimoto teaches a pointing device (1) associated with a display device (pointing device 1 controls a cursor, 108, which chooses the icons on the display device) and for use to operate upon an object (108) to change displayed on a display screen by the display device (upon selection of VTR in the menu 220 of Fig. 7, the color of the cursor changes and the VTR mode menu screen 223 appears),

the pointing device (1) characterized by including a position information detecting means (2 and 3) for detecting position information on positions indicated by the pointing device (col. 14, lines 15-25), wherein, based on the position information (position information from elements 2 and 3), the position information detecting means samples the move distance between said indicated positions (e.g. positions before and after the position Y1) per unit time (from the start to time t1 cursor moves to position Y1, from position t1 to (t1+t2) the cursor does not move, and then from (t1+t2) to time t the cursor moves), (col. 29, lines 2-7) and

determines the amount of change of said object to change on said display screen (the cursor 108 moves when the delay time t of the delay circuit 67 is equal to t1+t2),

based on the duration of sampling (from start to t1, from t1 to (t1+t2), and then from (t1+t2) to t) during which the sampled move distance between said indicated positions per unit time exceeds a threshold continuously (the cursor moves up to Y1 from the start to time t1 but when it exceeds t1 it does not move from t1 to t2, then the cursor moves once again when the angular velocity exceeds t1+t2).

As to claim 10,Hashimoto teaches a display device (100) associated with a pointing device (pointing device, 1, controls a cursor, 108, which chooses the icons on the display device) for use to operate upon an object (108) to change on a display screen (upon selection of VTR in the menu 220 of Fig. 7, the color of the cursor changes and the VTR mode menu screen 223 appears),

the display device characterized by including:

a change amount determining means (67, 68, and 68a), wherein, based on position information (information from elements 2 and 3) on positions indicated by said pointing device (positions in horizontal and vertical directions), the change amount determining means samples the move distance between said indicated positions (position before and after Y1) per unit time (from start to t1, from t1 to (t1+t2), and then from (t1+t2) to t) and

determines the amount of change of said object to change on said display screen (the cursor 108 moves when the delay time t of the delay circuit 67 is equal to t1+t2),

based on the duration of sampling (from start to t1, from t1 to (t1+t2), and then from (t1+t2) to t) during which the sampled move distance between said indicated positions per unit time exceeds a threshold continuously (the cursor moves up to Y1 from the start to time t1 but when it exceeds t1 it does not move from t1 to t2, then the cursor moves once again when the angular velocity exceeds t1+t2).

as to claim 11, this claim differs from claim 8 only in that the limitation "an angular velocity detecting means for detecting angular velocity information on positions indicated by said pointing device" and "a move information sampling means for sampling the move distance between said indicated positions per unit time, based on the angular velocity information detected by the angular velocity detecting means" is additionally recited.

Hashimoto teaches an angular velocity detecting means (2 and 3), for detecting angular velocity information on positions indicated by said pointing device (col. 14, lines 15-25) and a move information sampling means (67, 68 , and 68a) for sampling the move distance between said indicated positions (e.g. positions before and after the position Y1) per unit time (from the start to time t1, from time t1 to time (t1+t2), and then from time (t1+t2) to time t), (col. 9, lines 2-7), based on the angular velocity information detected by the angular velocity detecting means (col. 29, lines 10-14), (the angular speed detectors detect the speed of angular motion in the horizontal and vertical directions).

As to claim 12, Hashimoto teaches a display system comprising:

a display device (100) and

a pointing device (1) associated with the display device (pointing device 1 controls a cursor, 108, which chooses the icons on the display device) and for use to move a pointer position pointing on a display screen displayed by said display device (col. 21, lines 62-65), the display system characterized by including:

a position information detecting means (2 and 3) for detecting position information on positions indicated by said pointing device (col. 14, lines 15-18);

a move information sampling means (67, 68, and 68a) for sampling the move distance between said indicated positions (e.g. positions before and after the position Y1) per unit time (from the start to time t1 cursor moves to position Y1, from position t1 to (t1+t2) the cursor does not move, and then from (t1+t2) to time t the cursor moves), (col. 29, lines 2-7), based on the position information detected by the position information detecting means (as can be seen in Fig. 45A, the output of the angular speed depends on detectors 2 and 3), (col. 29, lines 10-14); and

a move distance determining means (67, 68, and 68a), (the distance through which the cursor 108 moves when the delay time t of the delay circuit 67 is equal to t1+t2) for determining a distance by which said pointer position should be moved (from start to t1 the cursor moves to position Y1, from time t1 to (t1+t2) the cursor does not move, and then from time (t1+t2) to t the cursor moves once again), based on the duration of sampling (from start to t1, from t1 to (t1+t2), and from (t1+t2) to t) during which the move distance between said indicated positions per unit of time, sampled by

the move information sampling means, exceeds a threshold continuously (the cursor moves up to Y1 from the start to time t1 but when it exceeds t1 it does not move from t1 to t2, then the cursor moves once again when the angular velocity exceeds t1+t2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Gillick (U.S. Patent No. 5,530,455).

As to claims 2 and 5, this claim differs from claim 1 only in that the claims additionally recites the limitations "equipped with a function of presenting an indicator for value setting in a menu item displayed on a screen and making the indicator slide in a value incremental or decremental direction in accordance with the received angular velocity information" and "determining the amount of increment or decrement of the indicator for value setting".

Hashimoto does not teach making the indicator slide in a value incremental or decremental. Gillick teaches a pointing device (10) and an image display device (Fig. 3) is equipped with a function of presenting an indicator (27, scrolling bar), (decoder 63 determines the speed of scrolling and the amount of scrolling) for value setting in a menu item (value of roller motion, wherein there will be one line scroll for each vertical

scroll message) displayed on a screen (scroll one line, Fig. 3) and making the indicator slide in a value (value of roller motion) incremental or decremental direction in accordance with the received angular velocity information (col. 2, lines 49-59).

determining the amount of increment or decrement of the indicator for value setting (col. 6, lines 3-9). Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to have added the indicator slide in a value incremental or decremental of Gillick to the image display device of Hashimoto because the turning of the roller in conjunction with driver software, generates scroll signals to windows which mimics the action of the user clicking in the scroll controls, but without requiring the cursor to be moved to the scroll controls (col. 2, lines 31-34).

As to claim 3, this claim differs from claim 1 only in that the limitations "equipped with a panning function of moving an image displayed on a screen in accordance with the received angular velocity information" and "means for panning by a distance" are additionally recited.

Hashimoto does not mention moving an image displayed on a screen in accordance with the received angular velocity information.

Gillick teaches image display device (Fig. 7) equipped with a panning function of moving an image displayed on a screen (moving the image one line for each scroll message, col. 5, lines 34-36 and col. 6, lines 1-2) in accordance with the received angular velocity information (col. 6, lines 3-7) and means (24) for panning by a distance (the image will scroll/move one line for each scroll message).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sato (U.S. Patent No. 5,453,758) teaches an input apparatus comprising one or more detectors for detecting a physical displacement of a given movement in space, an information generating device for generating position specifying information based on a detection result outputted from the detectors.

Shibata (U.S. Patent No. 6,164,808) teaches A three-dimensional data input device for a computer having a display screen includes a ball rotatably provided in a device body, and sensors for detecting rotation magnitudes of the ball along two axes on a plane and outputting displacement signals indicative of the detected rotation magnitudes.

Rekimoto (U.S. Patent No. 6,556,185) teaches when the whole portable type information processing device (PDA) is rotated around the X-axis, the Y-axis or the Z-axis with the operation button being pushed, the rotation is detected by a triaxial gyro sensor, and on the basis of the detection result a cursor displayed on the screen is moved on the menu.

Inquiry

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pegeman Karimi whose telephone number is (571) 270-

1712 and direct fax number is (571) 270-2712. The examiner can normally be reached on Monday-Thursday 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pegeman Karimi
February 11, 2008

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SUPERVISORY PATENT EXAMINER